

OPTICAL WAVEGUIDE GRATING COUPLER

Abstract

5 An optical waveguide grating coupler for coupling light between a planar
waveguide and an optical element such as an optical fiber. The optical waveguide
grating coupler includes a grating comprising a plurality of elongate scattering elements.
The optical waveguide grating coupler is preferably flared, and in various embodiments
has hyperbolically shaped sidewalls. The elongate scattering elements are preferably
10 curved, and in some embodiments, the scattering elements have elliptically curved
shapes. Preferably, the elongated scattering elements have grating widths selected to
accommodate the desired optical intensity distribution.